

IN THE CLAIMS:

Please cancel claims 56-83, 89 and 90, amend claim 84, 91, 92 and 95, and add new claims 96-106. Pending claims 84-88 and 91-106 are presented below:

1-83. (Canceled)

84. (Currently Amended) ~~A method for use in In an infusion system comprising an~~
~~external~~ infusion device for infusing a fluid insulin into a body of a user, ~~and a programmer~~
~~the~~
external infusion device including at least one processor, a housing adapted to contain the at least one processor, at least one display to interface with at least one of the at least one processor, at least one data input device to interface with at least one of the at least one processor, and at least one portable power supply contained within the housing to provide power to at least one of the at least one processor, ~~to use~~ a method of estimating a bolus amount of fluid insulin to be infused into the body, the method in the external infusion device comprising the steps of:

providing the external infusion device;

inputting externally supplied values and an estimate of a ~~material~~ carbohydrate to be ingested by the body into the ~~programmer~~ processor to estimate the bolus amount of fluid insulin to be infused based upon the estimate of the ~~material~~ carbohydrate to be ingested by the body, wherein the externally supplied values and the estimate of the ~~material~~ carbohydrate to be ingested by the body are input using the at least one data input device;

calculating an estimate of the bolus amount of fluid insulin to be infused into the body based upon the externally supplied values and the estimate of the ~~material~~ carbohydrate to be ingested by the body; and

providing the estimate of the bolus amount of fluid insulin to the user ~~for on the at least~~
one display so that the user can determine whether to use the estimate of the bolus amount of insulin with the external infusion device to infuse the estimated bolus amount of insulin.

85. (Previously Presented) A method according to claim 84, wherein the at least one data input device is at least one touch screen element to interface with at least one of the at least one processor.

86. (Previously Presented) A method according to claim 84, wherein the at least one data input device is at least one button to interface with at least one of the at least one processor.

87. (Previously Presented) A method according to claim 84, further comprising the step of calculating a correction bolus based upon a current characteristic value and a target characteristic value.

89. (Canceled)

90. (Canceled)

91. (Currently Amended) A method according to claim 84, further comprising the step of programming the infusion device to infuse the estimate of the bolus amount of fluid insulin into the body.

92. (Currently Amended) A method according to claim 91, further comprising the step of providing a lockout to prevent calculation of the estimate of the bolus amount of fluid insulin to be infused for a predetermined period of time after infusion of the bolus amount of fluid insulin into the body by the infusion device.

92. (Previously Presented) A method according to claim 91, further comprising the step of providing a lockout to prevent calculation of the estimate of the bolus amount of fluid to be infused for a predetermined period of time after infusion of the bolus amount of fluid into the body by the infusion device.

93. (Previously Presented) A method according to claim 84, wherein the externally supplied values are codes representing a carbohydrate value of specific foods.

94. (Previously Presented) A method according to claim 84, wherein the externally supplied values are codes representing a carbohydrate value of specific meals.

95. (Currently Amended) A method according to claim 84, further comprising the steps of:

determining a duration of how long a previously infused amount of ~~liquid~~ insulin will remain active in the body based upon a duration factor; and

adjusting the estimate of the bolus amount of ~~fluid~~ insulin to be infused based upon the determined duration.

96. (New) A method according to claim 84, wherein the externally supplied values include at least a carbohydrate ratio.

97. (New) A method according to claim 84, wherein the externally supplied values include at least an insulin sensitivity.

98. (New) A method according to claim 84, wherein the externally supplied values can be entered and stored in a memory of the external infusion device to be used in one or more estimates of the bolus amount.

99. (New) A method according to claim 84, further comprising the step of reviewing the estimate of the bolus amount to determine whether to provide the estimate of the bolus amount to the processor of the external infusion device.

100. (New) A method according to claim 99, further comprising the step of either accepting or adjusting the estimate of the bolus amount before providing the estimate of the bolus amount to the processor of the external infusion device.

101. (New) A method according to claim 99, further comprising the step of providing the estimate of the bolus amount to the processor of the external infusion device by using the at least one data input device.

102. (New) A method according to claim 84, wherein the at least one data input device includes at least one transmitter to wirelessly interface with at least one of the at least one processor.

103. (New) A method according to claim 102, wherein the at least one transmitter wirelessly interfaces with at least one of the at least one processor using IR communications.

104. (New) A method according to claim 102, wherein the at least one transmitter wirelessly interfaces with at least one of the at least one processor using RF communications.

105. (New) A method according to claim 102, wherein the at least one transmitter to wirelessly interfaces with at least one of the at least one processor using Optical communications.

106. (New) A method according to claim 84, wherein the at least one data input device includes at least one cable to interface with at least one of the at least one processor.